-DRAFT-
New York State Watershed Implementation Plan

For

Chesapeake Bay

Total Maximum Daily Load

NYS Department of Environmental Conservation

NY Plan Location

- www.dec.state.ny.gov
  - Type “Chesapeake” in search box
- www.epa.gov/chesapeakebaytmdl

Contacts:

Ron Entringer, raentrin@gw.dec.state.ny.us

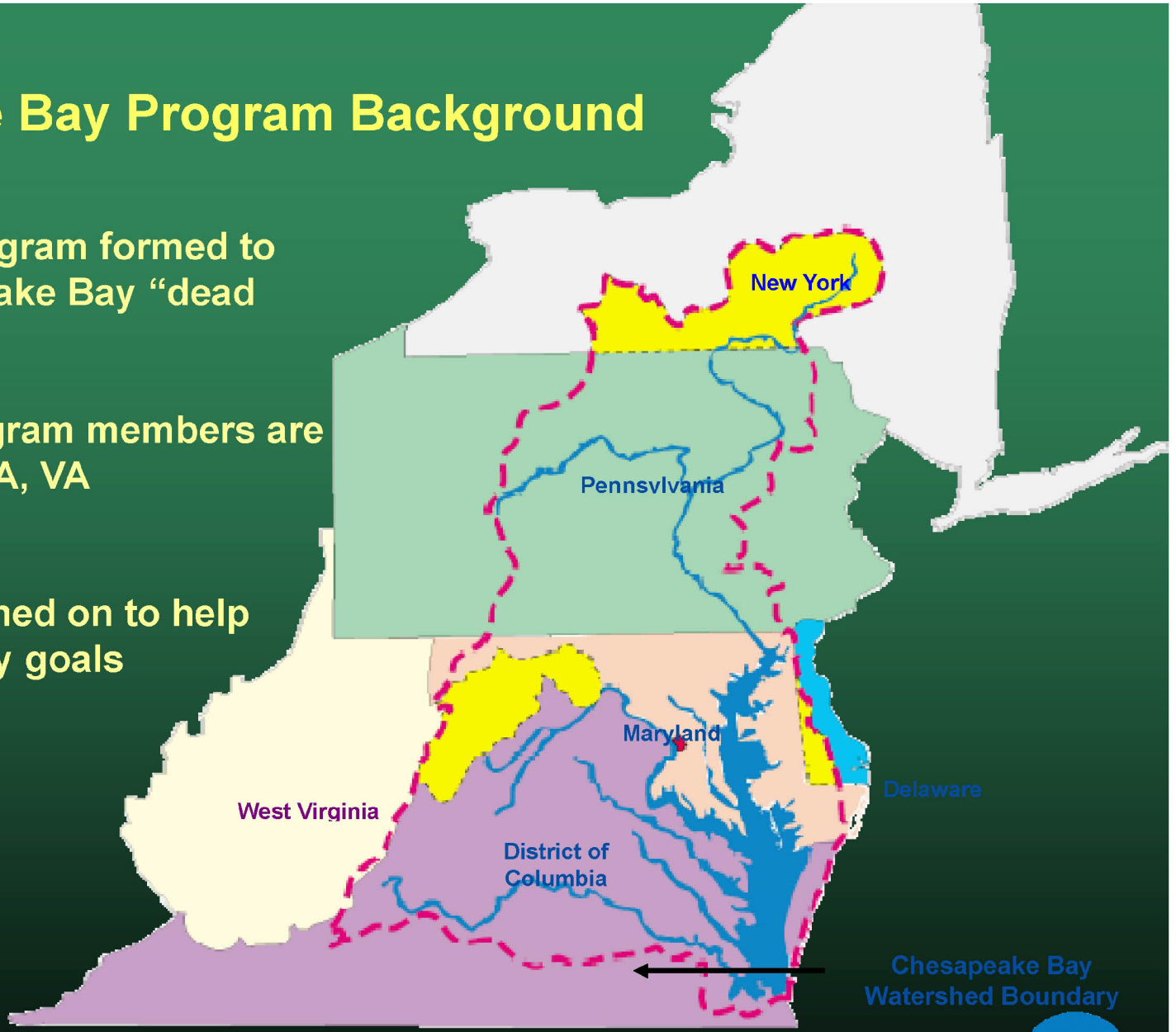
Peter Freehafer, pbfreeha@gw.dec.state.ny.us

Chesapeake Bay Program Background

1983
A multi-state program formed to restore Chesapeake Bay "dead zones"

The original program members are D.C., EPA, MD, PA, VA

2000
DE, NY, WVA signed on to help with water quality goals



NYS Department of Environmental Conservation

NY Part of Chesapeake Bay Watershed

- 10% of watershed area
- 4% of watershed population (unchanging)
- 76% forested
- 21% agricultural
- 3% developed

NYS Department of Environmental Conservation

NY is a Good Neighbor

- Implementing strong Clean Water and Clean Air programs
- Overall low air and water pollution rates
- Recognize Chesapeake Bay significance
- Implementing Chesapeake Tributary Strategy (2006) in partnership with Upper Susquehanna Coalition and others

NYS Department of Environmental Conservation

NY Chesapeake Plan Overview

- Statewide Waterbody Assessment and Protection and Improvement Planning
  - TMDL experience
- NY Draft Chesapeake Plan
  - Development Process
  - Specific Elements
- EPA Review

Assessment of NY Waters

- Waterbody Inventory / Priority Water List
  - The “book” for each major river basin in NY
  - Repeated monitoring and assessment
    - Impaired waters identified for Total Maximum Daily Load development (List approved by EPA)
    - Lesser impacts identified to assist water program implementation

NY Major River Basins

NYS Department of Environmental Conservation

NY TMDL Experience

- NY has broad experience with nutrient TMDLs and watershed implementation plans
  - Long Island Sound, Lake Champlain (multi-state)
  - NYC Catskill water supply (rural)
  - NYC East of Hudson (urban)
  - Small lakes (Salubria, Whitney Pt. Reservoir)

NY's Susquehanna and Chemung River Basins

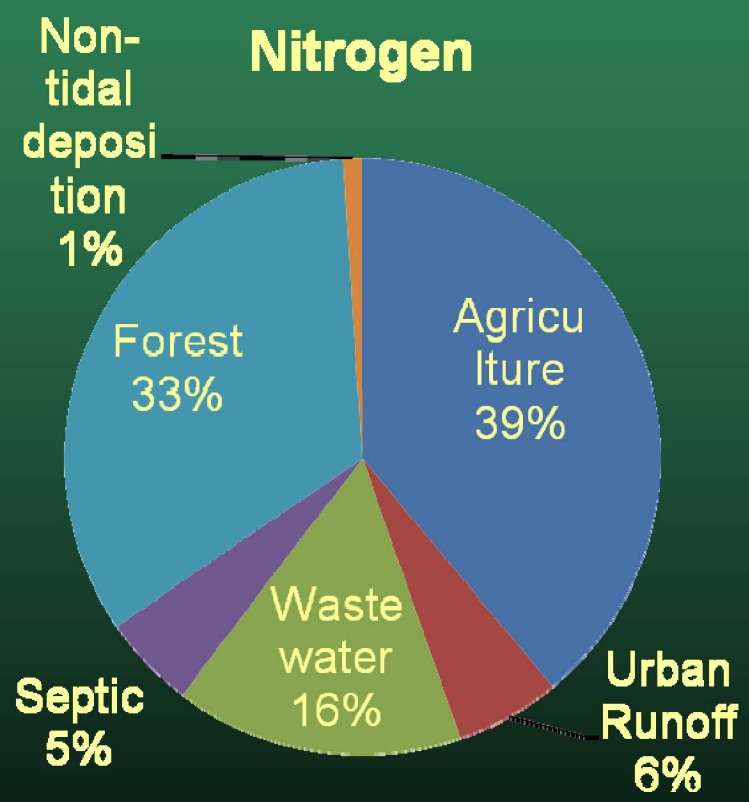
- No significant nutrient listings on the official EPA impaired waters list
- Many lesser phosphorus and sediment impacts
- Flooding susceptibility
- Public water supplies

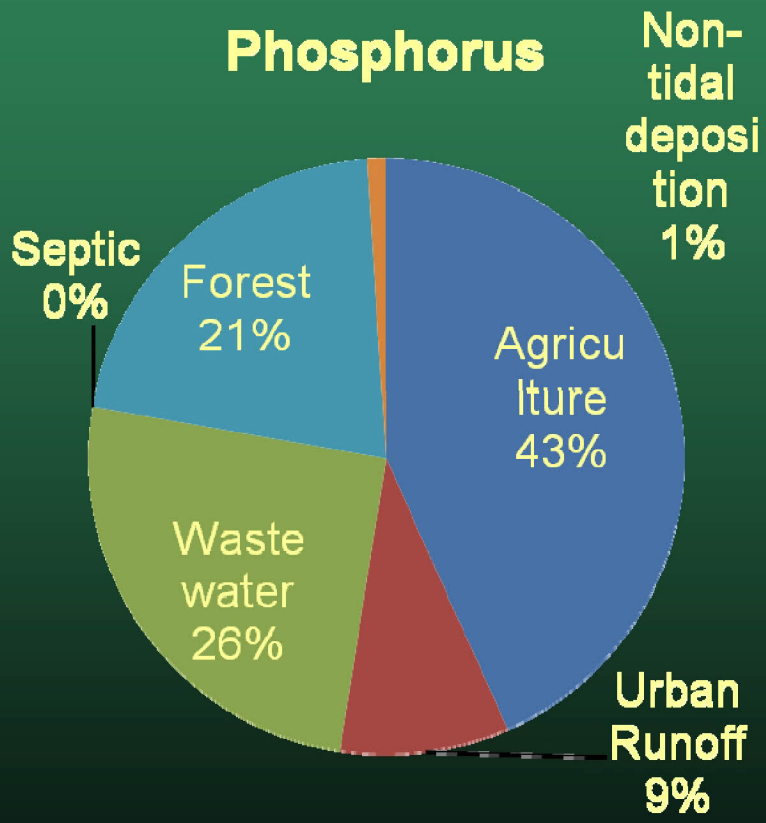
NYS Department of Environmental Conservation

NY Draft Chesapeake Plan Development

- Building blocks
  - 2002 Watershed Restoration and Protection Action Plan
    - Addressed items in NY Waterbody Inventory
  - 2006 NY Chesapeake Bay Tributary Strategy
  - Stakeholder Input
    - Agriculture, Wastewater, Municipal Storm Sewers

Distribution of NY Sources 2009





EPA Watershed Model V5.3

NYS Department of Environmental Conservation

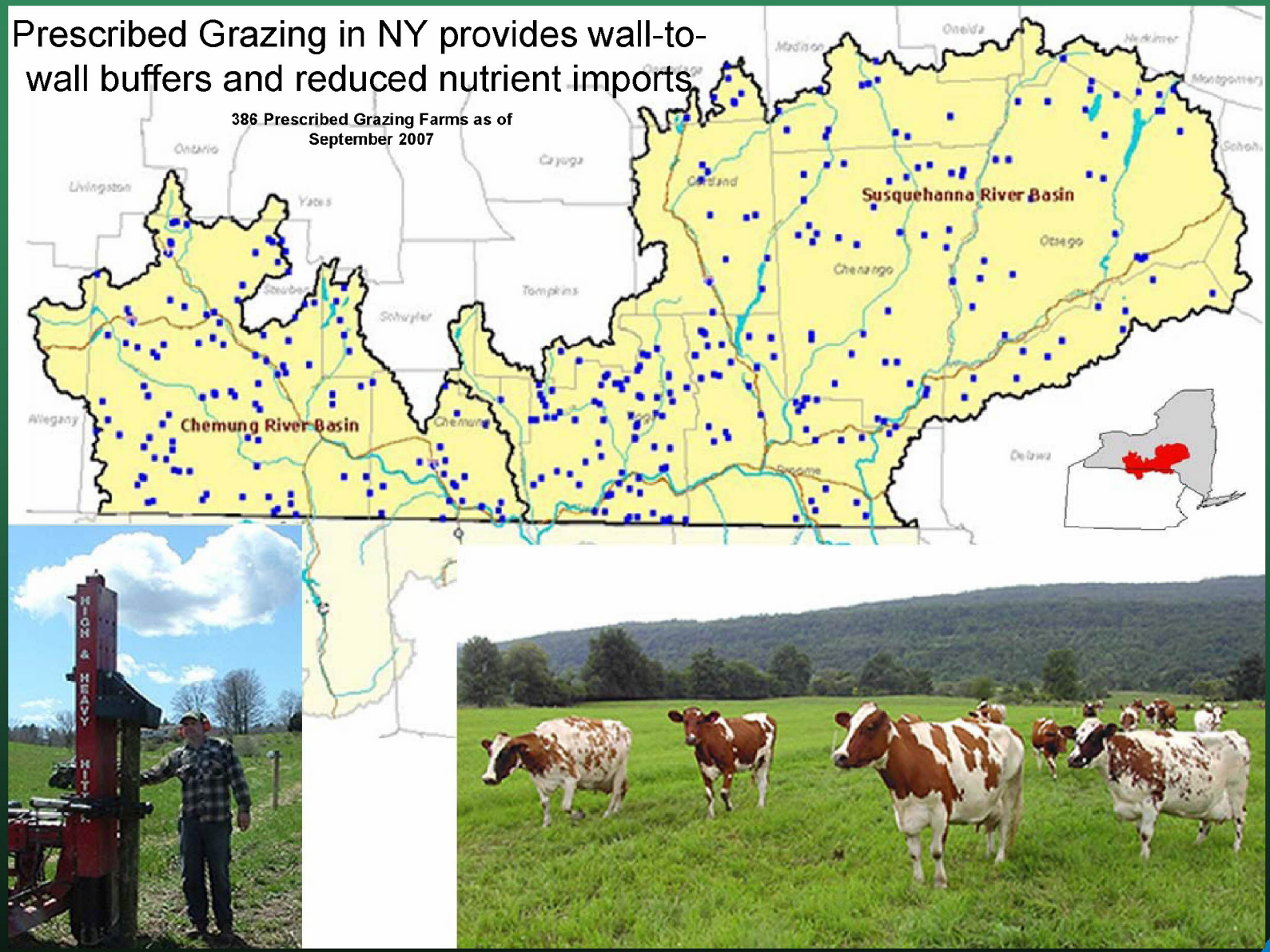
Plan Development Premises

- Target effective conservation practices
- Do well at what we are already supposed to do before rushing to develop new rules, programs, policies
- Support program enhancements appropriate to NY (urban runoff, rural roads, other future innovations)

Agriculture

- Heightened implementation via NY Agriculture Envi. Management Program
  - Science-based technical standards
  - Increasing local, state, federal funding through 2025
  - Supported through efforts of Upper Susquehanna Coalition
- Continue effective implementation of NY CAFO program
- Cost ~200 Million (EPA backstop ~$350M)

Prescribed Grazing in NY provides wall-to-wall buffers and reduced nutrient imports



NYS Department of Environmental Conservation

Credit: Upper Susquehanna Coalition

Wastewater

- 28 largest (~90% of total discharge)
  - Nitrogen
    - Binghamton-Johnson City ~$75M upgrade
    - Optimize others without major capital work
  - Phosphorus
    - Add Chemical Coagulation treatment
- Cost ~$140M (EPA Backstops ~$1.0 -1.5 Billion)
- New facilities (nitrogen 8 mg/l phosphorus 1 mg/l)

Binghamton-Johnson City Wastewater Treatment

NYS Department of Environmental Conservation

Urban Runoff

- Effective implementation of NY's state-of-the art MS4 and Construction permits
  - Includes updated design manual
    (green infrastructure for development and redevelopment)
  - Includes 2010 Phosphorus legislation
    (residential fertilizer /dishwasher detergent)
- Evaluate/propose enhancements
  (to cover more road side with enhanced management practices)
- Cost ~25M (EPA Backstop $1-6Billion)

Infiltration Basin - Waverly

NYS Department of Environmental Conservation

Broome County SWCD

NYS Department of Environmental Conservation

Other Activities

- Executive Order 13508 “basin” goals
  - Stream habitat improvement, wetland creation, forest protection
- Floodplain management
- Susquehanna-Chemung Ecosystem-Based Action Plan (Southern Tier Central Regional Planning and Development Board)
- NY national leader in air emission controls

Wetland creation by Upper Susquehanna Coalition

NYS Department of Environmental Conservation

Offsetting New Pollution Sources

- New significant sources of nutrients must include permit provisions to ensure no net increase
- Represents a significant planning and administrative task

New York Draft Phase I Watershed Implementation Summary

- Aggressive and achievable plan
- Cost effective
- Actions that are good for New York and Chesapeake Bay
- Balance within context of vast and diverse Chesapeake Bay watershed

NYS Department of Environmental Conservation

Draft Nature of Plan

- Limited time to prepare (July-September)
  - Changing numbers associated with modeling
- Working to reasonably assure EPA that NY can implement its plan
- A gap remains

EPA Backstops

- New York WIP seriously deficient
  - WWTP
    - All to extreme limit of technology (0.1 mg/l P, 3.0 mg/l N), Cost : $1.0-$1.5 Billion
  - Agriculture
    - All farms with CAFO requirements and more, Cost : ~$350M plus impacts to small farm viability
  - Urban Runoff
    - Vast retrofit (‘0” discharge), Cost $1-6 Billion

Considerations

- NY has effective water resource programs
- NY has half the pollution rate of other states
- NY pollution baseline has declined during time of Bay “dead zones”, whereas it has grown significantly near the Bay
- NY receives no direct benefit from the Bay

Additional Improvements

- NY will work with EPA to ensure its models accurately portray NY's programs and practices
- New Technologies/programs
  - Road system BMPs

    Wastewater nitrogen optimization, reuse
  - Continuing advances in agriculture nutrient management

Conclusion

- NY will continue to be a good neighbor
- NY has developed a credible stakeholder driven Chesapeake Plan
- Important to protect our high value water resources of NY Southern Tier
- Encourage additional public comment